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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,643	04/25/2000	Shulong Li	2129A	9252

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EXAMINER	
SINGH, ARTI R	
ART UNIT	PAPER NUMBER
1771	6

DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/557,643	Applicant(s) LI, SHULONG	
	Examiner Ms. Arti R. Singh	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 April 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed on 11/20/0 as paper no. 4, had no references listed, however it has been signed and remitted.

Specification

2. The disclosure is objected to because of the following informalities:

3. At the beginning of the Specification (page 1) under the heading "Cross Reference To Related Applications", the continuity data needs to be updated as Application 09/350,620 has matured into U.S.P.N. 6,117,366 and Application 09/335,257 has matured into U.S.P.N. 6,177,365. Appropriate correction is required.

4. Throughout the disclosure and specifically on page 1, line 18 after the number 2,000 there should be a unit such as "psi".

5. The uses of Trademarks/Tradenames have been noted throughout this application (for example on p.14, line 6-Amsperse). They should be capitalized wherever they appear and be accompanied by the generic terminology. Although the use of Trademarks/Tradenames is permissible in patent applications, the proprietary nature of the marks/names should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as a trademark or tradename. To describe physical or other properties of material by mere use of trademark is objectionable since it has tendency to make trademark descriptive of product rather than leaving trademark to serve its traditional purpose, which is to identify product's source of origin.

6. On page 18, line 10 and page 22, line 16, the application to Sollars Jr. et al., 09/406,264 has matured into U.S.P.N. 6,220,309. Please update this information.

Claim Objections

7. Claim 10 is objected to because of the following informalities: there is no unit, i.e. psi, after the phrase "tensile strength of at least 2000". Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Independent claim 10 recites physical properties of an airbag cushion comprising a coated fabric possessing a tensile strength of at least 2000 psi and an elongation break of at least180% and wherein said airbag cushion exhibits a leak down time of 5 seconds after inflation. A claim merely setting forth physical characteristics desired in an article and not setting forth specific compositions which would meet such characteristics, are invalid as vague, indefinite and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future and which would impart the desired characteristics. Note *Ex Parte Slob, 157 USPQ 172*. Thus, claim 10 is deemed to be indefinite for reciting only the desired physical properties of the coated fabric, rather than setting forth any structural and/or chemical characteristic of airbag cushion comprising a coated fabric.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Li et al. U.S.P.N. 5,945,186. Li et al. disclose a coated base fabric for use in an airbag (abstract). The coated base fabric includes a substrate, which is overcoated with a cross-linked elastomeric resin, which the Examiner is equating to be the film coating recited by Applicant. It should be noted that the coating of Li et al. impregnates the fabric to form an impermeable barrier just as the film of the present invention does. Support for this deduction can be found in Applicant's own admission that the film requires heat and pressure in order for the film to cement between and to the individual yarns of the fabric (Applicant's disclosure page 11, lines 14). Such resins may be selected from the group consisting essentially of polyamide, butyl rubber, EPDM, polyurethane, hydrogenated rubber, NBR, acrylic rubbers and mixtures thereof (column 2, lines 39-42). The coating weight is usually between 0.1 to 0.5 ounces per square yard (column 2, lines 33-35 and abstract). The substrate across which the cross-linked elastomeric resin coating is applied to form the airbag bag base fabric in accordance with the present invention is preferably a plain woven fabric formed from yarns comprising a polyamide (nylon 6, 6- column 4, line 65), or polyester fibers. Such yarns preferably have a linear density of about 210-630 denier. Such yarns are preferably formed of multiple

filaments wherein the filaments have their own linear densities of 6 denier or less (column 3, lines 53-64).

Given that Li et al. meet each and every chemical and structural requirement set forth in the claims, then it must meet the property limitations of leak down time, tensile strength, and elongation at break recited that depend from said requirements. In other words, it is reasonable to presume that the invention of Li et al. would inherently anticipate the physical properties of the present invention, since both inventions are comprised of coated fabrics coated with a polyurethane coating in an amount at most 2.7 ounces per square yard, said fabric being a woven polyamide, preferably a nylon 6,6 wherein the yarns have a linear density of 210-630 denier and a single filament density of about 7 denier or less.

Since no other structural or chemical features are claimed which may distinguish the present invention from that of the Li et al. invention, the presently claimed physical properties that is leak down time, tensile strength and elongation at break are deemed to be inherent to the invention of Li et al. The burden is upon Applicant to prove otherwise. Note *In re Fitzgerald 205 USPQ 495*. Without a showing that evidences a difference between the prior art and the present invention, anticipation is proper. However, such evidence could support the proposition that the current claims are incomplete.

12. Claims 1-6 and 8-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Menzel (USPN 5,110,666). Menzel et al. disclose an airbag for use in motor vehicles made of a synthetic fabric coated with a thin layer of polyurethane coating (column 1, lines 12-15) which the Examiner is equating to the film coating recited by Applicant. It should be noted that the coating of Menzel et al. impregnates the fabric to form an impermeable barrier just as the film of the present invention does. Support for this deduction can be found in Applicant's own admission that the film requires heat and pressure in order for the film to

cement between and to the individual yarns of the fabric (Applicant's disclosure page 11, lines 14). The fabric substrate may be polyamide, preferably nylon of polyester woven or nonwoven (column 3, lines 19-65). Any denier, shape, weave configuration may be used in formulating the fabric depending upon the desired end result of the airbag (column 3, lines 19-27). In the working example shown in column 5, the airbag construction employs a 420 denier, nylon 6,6. The fabric substrate may be selectively coated in the forms of stripes, dots, wavy lines, or other patterns to obtain the desired air permeabilities of the coated fabric (column 3, lines 19-27). For the lowest permeability, the coating is applied to substantially cover the entire fabric. A coating weight of between 0.1 and 1 ounces per square yard and preferably 0.25 to 0.75 ounces per square yard, which falls within Applicant's claimed range of at most 2.7 ounces per square yard. This coating enables the coated fabric to be lightweight, foldable and cuttable without fraying the fibers of the fabric (column 3, lines 28-34). The type and amount of coating to be applied will vary depending upon the end results desired (column 4, lines 1-7). In the same section of the patent, Menzel et al. alludes to the fact that if heavier coating weights are required, a three head coater may be employed.

Given that Menzel et al. meet each and every chemical and structural requirement set forth in the claims, then it must meet the property limitations of leak down time, tensile strength and elongation at break are recited that depend from said requirements. In other words, it is reasonable to presume that the invention of Menzel et al. would inherently anticipate the physical properties of the present invention, since both inventions are comprised of coated fabrics coated with a polyurethane in an amount at most 2.7 ounces per square yard, said fabric being a woven polyamide, preferably a nylon 6,6 wherein the yarns have a linear density of 210-630 denier.

Since no other structural or chemical features are claimed which may distinguish the present invention from that of the Menzel et al. invention, the presently claimed physical properties that is leak down time, tensile strength and elongation at break are deemed to be inherent to the invention of Menzel et al. The burden is upon Applicant to prove otherwise. Note *In re Fitzgerald 205 USPQ 495*. Without a showing that evidences a difference between the prior art and the present invention, anticipation is proper. However, such evidence could support the proposition that the current claims are incomplete.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute0 so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F. 3 d 1046, 29 USPQ 2 d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F. 2 d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F. 2d. 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F. 2d. 438,164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F. 2d. 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (c) may be used to overcome an actual or provisional rejection based in a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130 (b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73 (b).

14. Claims 1-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 8 of U.S. Patent No. 5,945,186.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference seen between the patent and the present Application is the variation in the range of the coating and the way in which it is being applied. Both the 5,945,186 and the present Application are concerned with coating a polyamide fabric for use in an airbag. They both require that the fabric be woven from polyamide yarns, preferably nylon 6,6, said yarns have a total linear density of 210-630 denier, a single filament which makes up the yarn to have a linear density of 4 denier or less and that the fabric is coated. The coating in both the patent and the present Application require that the coating be a polyurethane. Thus, the difference between the patent and the present Application is that the patent only requires the coating weight to be present in the range of 0.1 to 0.5 ounces per square yard and the present Application requires the same coating to be in an amount of at most 2.7 ounces per square yard. It should be noted that the Examiner is equating the film coating to be equivalent to the resin coating employed by the Patnet. Both coatings, whether called a film or a resin, impregnate the fabric to form an impermeable barrier. Therefore, the present Application encompasses the range 0.1 to 0.5 ounces per square yard as that taught by US Patent 5,945,186.

Furthermore, a skilled artisan would have found it obvious to have employed the increased coating weight in an airbag, motivated by the desire to attain an airbag which had greater impermeability, such as a side curtain airbag which necessitates that the air remain within the airbag for a longer period of time.

15. Claims 1-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 10-20, 24-33 and 35-39 of copending Application No. 09/501,467. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of Application

09/501,467 are drawn to an airbag cushion comprising a coated fabric, whereas the present Application 09/557,643 is drawn to an airbag cushion comprising a fabric laminated with a film. Both Applications require the same structure and chemistry for the airbag fabric and it's coating. However, the Application 09/501,467 refers to the coating as an elastomeric composition i.e. a resin, whereas the present Application 09/557,643 refers to the coating as a film. As set forth above, the Examiner takes the position that the coating whether it is a film or a resin is accomplishing the same task, which is to chemically impregnate the fabric layer to form an impermeable barrier. Furthermore, the present Application claims a coating weight of "at most 2.7 ounces per square yard whereas, Application 09/501,467 claims a coating in an amount of at most 2.5 ounces per square yard. Therefore, the claimed coating weight of 2.5 ounces per square yard as set forth by Application 09/501,467 falls within the claimed coating range of 2.7 ounces per square yard of the present Application 09/557,643, and thus no patenable distinction is seen.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Arti R. Singh whose telephone number is 703-305-0291. The examiner can normally be reached on M-F 7:00am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-873-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Ms. Arti R. Singh
Patent Examiner
Art Unit 1771

ars

September 23, 2002